



Massachusetts Department of Energy Resources
Creating A Greener Energy Future For the Commonwealth

Smart Growth Smart Energy

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Massachusetts Sustainable Forest Biomass Initiative

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Massachusetts Sustainable Forest Bioenergy Initiative (SFBI)

An Initiative of the DOER and DCR to assess the potential for biomass energy in the Commonwealth, and strategically develop the supply infrastructure needed to enable bioenergy project development (funded by U.S. DOE, and MTC).



Technical Reports

- Forest Harvesting Systems
- Massachusetts Biomass Resource Supply Assessment
- Economic Impact Analysis
- Energy Crop Potential
- Forest Health and Protection
- Strategic Plan for Establishing Biomass Supply Infrastructure (under preparation)

SFBI – Resource Assessment

- Ample woody biomass exists in western MA and surrounding region to support growing bioenergy economy.
- Increased forest management is important to expand MA derived resource.

RESOURCE	GREEN TONS PER YEAR	POTENTIAL BIOMASS GENERATION
EXISTING RESIDUES		
Existing Operations (Residues) from 5 western MA counties	630,000	50 MW
Above + surrounding counties from bordering states	3.6 million	270 MW
FOREST DERIVED		
Forest net-growth (50% harvest) in 5 western MA counties	626,000	50 MW
Above + surrounding counties from bordering states	5.7 million	425 MW





SFBI – Economic Impact Study

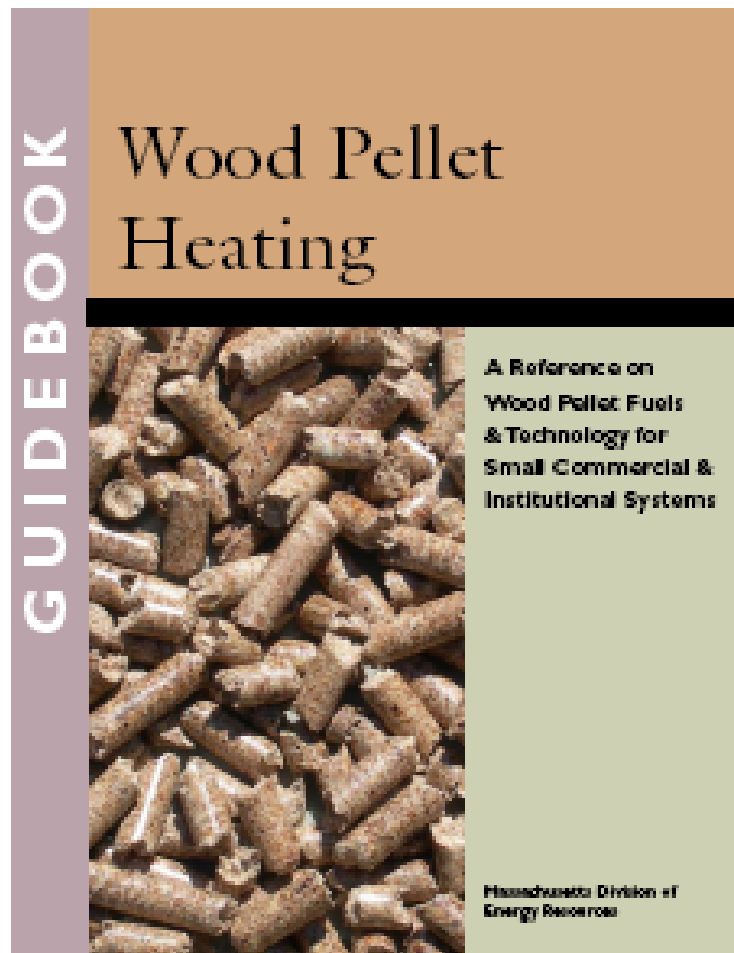
- UMass Resource Economics was contracted to perform potential economic impact study of woody biomass in MA. Utilized IMPLAN model
- Considered biomass build-out by 2015 of 165 MW of new biomass electricity generation units as well as a number of smaller heat-only plants.
- **Findings:**
 - ✓ On-going increase in western MA (5-county) regional economic output of **\$57 million/year** and **440 new jobs**.
 - ✓ On-going increase in rest-of-MA of \$22 million and 153 new jobs.
 - ✓ Initial plant construction would create a total of **\$214 million** new output and **1,898 jobs/year for 5 years** in the 5 western MA counties,
 - ✓ as well as \$56 million new output and 346 jobs/year for 5 years in rest-of-MA.



State Assistance for Municipal Biomass Systems

- DOER Energy Audit Program includes site assessment for renewable energy applications, including solar PV, solar water heating, and biomass heating.
- Green Communities Act enabled the MA Renewable Energy Trust to expend funds on renewable thermal technologies, including biomass.
 - The Trust and DOER and other agencies will be establishing a Biomass Program over the next months.

Wood Pellet Heating Guidebook



Wood Pellet boilers are applicable to residential and municipal building loads.





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For SFBI website:

www.mass.gov/doer; look under
Renewable Energy / Biomass

or enter [Massachusetts](#)
[Sustainable Forest Bioenergy](#)
[Initiative](#) in your favorite search
engine.

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